DEVELOPING AND NURTURING INTERESTING AND RESEARCHABLE IDEAS

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A quick search of the Internet would suggest that ideas can easily be developed into something great; simply “tear them apart,” “keep it simple,” “play with them,” “find courage,” “stay loose,” or “ask a child.” Yet when confronted with actually needing to develop a new and interesting idea, the task can quickly become quite daunting and often frustrating. Ask a student to come up with a new idea, and the first response is often panic. Ask a seasoned researcher, and the response is as likely to be “Call me later” as it is to be “When can we start?” The simple truth is that coming up with good ideas is not a simple task, and the strategies for doing so are likely to be more complex than a set of motivational catchphrases might suggest. However, useful strategies for finding interesting and researchable ideas do exist. As a way of illustrating how to develop interesting research questions, this chapter describes how my own ideas concerning goal setting, peer relationships, and teacher caring have evolved over time. In this description, strategies that have proven to be useful for motivating innovative thinking, as well as for providing new perspectives on old ideas, are presented. Although it would be tempting to claim that these strategies have always been used in deliberate fashion throughout my research career, they have not. However, they represent ways in which I have thought about and developed new ideas for research.

The chapter begins with a description of three specific strategies for finding interesting ideas: challenging theoretical assumptions, documenting the published literature, and generating new variables. Next, illustrations of how to use these strategies to develop ideas in the area of goal setting, peer relationships, and teacher caring are presented. The chapter ends with reflections on some basic principles for developing interesting ideas. Throughout this chapter, the focus of discussion is on “interesting” ideas. This focus reflects the fact that a good idea is one that is interesting enough to motivate a researcher to do something with it and also is interesting enough to motivate others to pay attention to it.

FINDING INTERESTING IDEAS: DEVELOPING METHODS TO TAME THE MADNESS

What makes an idea interesting? How does one go about developing an interesting research
question or hypothesis? Unfortunately, there are not quick and easy answers to these questions. However, there are several characteristics of good ideas to keep in mind when searching for that perfect idea. First, the best ideas are always those that have a high degree of personal interest; ideas to guide empirical study must be motivating enough to sustain interest throughout the often long and arduous research process. Without this level of personal investment, research can quickly become a tiresome chore. Therefore, the first prerequisite for identifying interesting ideas is to discern what is fascinating and intriguing on a personal level.

In addition, however, what makes a question interesting also depends on the research audience. Indeed, the ability to convince others that something is interesting lies at the core of any successful idea. For the most part, research ideas and questions are likely to be interesting to other scholars if they address puzzling issues or unsolved mysteries (e.g., why do girls tend to earn higher grades than boys but do not score higher than them on standardized tests?) or if they support a set of theoretical assumptions that have been the source of intellectual debate (e.g., males are predisposed to developing more complex math skills than are females). Questions and ideas are likely to be interesting to teachers and educators if they lead to concrete solutions to difficult educational problems (e.g., how to motivate boys and girls equally to engage them in classroom activities). Finally, research ideas and questions are interesting to policymakers if they have the potential to support political agendas (e.g., do boys and girls learn better in coed classrooms than in single-sex classrooms?) or speak to long-standing social issues (e.g., does learning in coed classrooms level the playing field for females entering the workforce?).

Finding these interesting questions, however, is not an easy task. Knowing which puzzles are currently engaging other scholars or what types of instructional issues are posing challenges for teachers takes work and more than a cursory knowledge of the field. For instance, deciding to study sex differences in learning requires at least a core knowledge of the literature on motivation and cognitive development as well as an understanding of the literature that has documented sex differences in the past. Identification of theoretical perspectives that might explain these differences is also a prerequisite for developing an interesting idea to guide research. Unfortunately, all of this knowledge cannot be acquired in a short amount of time. Indeed, an initial search of the relevant databases might lead to quick abandonment of an idea if the result of the search is hundreds of abstracts on a topic.

There are several strategies, however, that can help to impose an order on a corpus of empirical findings and that ultimately can lead to interesting and researchable questions. These strategies involve identifying the theoretical assumptions that guide current research on a topic, systematically documenting published findings, and generating new variables. In the following sections, each of these strategies is described in turn with examples of how it has been used in work on classroom goals and peer relationships.

Identifying Theoretical Assumptions

Thinking about and challenging theoretical assumptions is perhaps the most difficult yet fruitful strategy to employ in generating new and interesting ideas for research. At the outset, it is necessary to identify the prevailing theoretical perspectives or assumptions that guide thinking about educational issues. Deciding what these are is often easier said than done because it is common for researchers to design studies without a theoretical basis—or, if conceptual models are cited in support of research, it is rare for researchers to test them formally. Therefore, it is left to the reader to discern the underlying assumptions guiding research on a topic. Although this might seem like a daunting task, quite often theoretical assumptions can be determined by simply applying common sense or the “What would your grandmother say?” rule. Indeed, simply talking to someone outside of the field about what others are studying and how they are going about it is likely to uncover important underlying assumptions and thereby help to generate new ideas and perspectives on a topic.

A good example of how to use this rule comes from my own work on the number and
types of goals that students pursue when they are at school (Wentzel, 1989). During the 1980s, most researchers interested in motivation at school were investigating students’ desires to achieve a standard of academic excellence, either by mastering a task or by demonstrating ability to others (e.g., Dweck & Leggett, 1988; Nicholls, 1984). The common wisdom was that an understanding of these two orientations toward achievement would explain academic performance. This assumption, however, did not seem to ring true for all students. First, it seemed to me that being a successful student sometimes required more than just attention to learning and doing well academically. Personal recollections of life in high school also suggested that even the best students often put significant amounts of effort into accomplishing things other than academics while they are at school. Conversations with family members and friends who were not studying educational psychology confirmed that being successful in school involved much more than academic pursuits. Therefore, as described in greater detail in a later section, I began to think about alternatives to the underlying assumptions that seemed to be guiding this work. If students pursue more than just academic goals at school, what are these goals and how might they also contribute to academic success?

A different tactic for challenging assumptions is to begin by identifying one’s own theoretical or philosophical inclinations and considering how the application of a personal worldview might change the way in which a topic is studied. To illustrate, one can start by asking broad theoretical questions relevant to a topic. Is learning and change a fairly linear and additive process, or is change the result of complex interacting systems that create nonlinear patterns of growth? How would a constructivist (e.g., Piaget, 1965) or a social learning theorist (Bandura, 1986) describe change over time? The answers to these types of questions are likely to provide contrasting approaches to a problem. For example, a constructivist perspective on the classroom goal issue would be to focus on those things that children are intrinsically interested in doing; if the belief is that social influences are central to development, then thinking about the expectations that adults impose on children with regard to schooling would be a logical place to start. Regardless of which perspectives guide one’s thinking, some new and interesting ideas are bound to develop if the status quo is challenged from a unique set of personal beliefs.

**Documenting Published Findings**

Perhaps the most straightforward strategy for organizing the literature on a topic is to document what has been done, with whom, and how. The identification of what has been accomplished makes it a relatively simple task to think about what still needs to be done. Ultimately, a topic needs to be narrowed to a point where the amount of information can be organized efficiently. At the outset, however, a fairly broad question should guide a search (e.g., are peer relationships related to academic achievement?). A novice to this area would first want to read widely and become familiar with the common questions and issues pertaining to peer relationships at school as well as how studies typically are conducted. For instance, a good start would be to document information on sample characteristics, independent and dependent variables, measures, designs, and relevant findings. Once a basic overview of the field has been achieved, the search can be narrowed to answer a more specific question. For example, ideas can be generated from a subset of studies defined by age groups or specific sample characteristics (e.g., how are peer relationships related to achievement during middle childhood?), methodologies (e.g., how are peer relationships, as operationalized in terms of sociometric status group membership, related to academic achievement?), or designs (e.g., how do peer relationships predict achievement over time?).

Table 18.1 illustrates how to document the literature to answer this question: Are peer relationships related to academic achievement? The “data” shown in the table reflect a fairly broad search of the literature, with the exception that peer relationships are defined exclusively by social acceptance and sociometric status group membership (for excellent examples of this strategy, see Newcomb, Bukowski, & Pattee, 1993; Parker & Asher, 1987). As shown in the table, each study can be described as a function
of sample characteristics, measures of independent and dependent variables, control variables, research design, and basic findings. By documenting these characteristics for each study, it becomes fairly easy to determine what has been done and how it has been done to answer the question. In the case of 12 studies on peer relationships and achievement, samples ranged from kindergartners to high school students. A range of measures has been used to assess peer acceptance, including peer nominations of classmates who they like and dislike, peer ratings of how much they like their classmates, sociometric status groupings (Asher & Dodge, 318)

### Table 18.1: Documenting the Literature: How Are Peer Relationships Related to Achievement?

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample Characteristics</th>
<th>Relationship Assessment</th>
<th>Achievement Assessment</th>
<th>Control Variables</th>
<th>Design</th>
<th>Results*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Preschoolers and 4th- to 6th-graders</td>
<td>Observations</td>
<td>IQ test</td>
<td>Sex</td>
<td>Longitudinal</td>
<td>*</td>
</tr>
<tr>
<td>2</td>
<td>2nd- to 7th-graders</td>
<td>Peer ratings</td>
<td>Standardized</td>
<td>Sex</td>
<td>Longitudinal</td>
<td>*</td>
</tr>
<tr>
<td>3</td>
<td>2nd- and 5th-graders</td>
<td>Status groups</td>
<td>Academic behavior</td>
<td>Sex</td>
<td>Correlational</td>
<td>*</td>
</tr>
<tr>
<td>4</td>
<td>3rd-graders</td>
<td>Status groups</td>
<td>Standardized</td>
<td>None</td>
<td>Correlational</td>
<td>*</td>
</tr>
<tr>
<td>5</td>
<td>Kindergarten</td>
<td>Status groups</td>
<td>Teacher ratings</td>
<td>Sex</td>
<td>Longitudinal</td>
<td>*</td>
</tr>
<tr>
<td>6</td>
<td>Kindergartners and 2nd- and 3rd-graders</td>
<td>Status groups</td>
<td>Standardized</td>
<td>None</td>
<td>Longitudinal</td>
<td>*</td>
</tr>
<tr>
<td>7</td>
<td>3rd- and 7th-graders and high school students</td>
<td>Peer nominations</td>
<td>Composite</td>
<td>None</td>
<td>Longitudinal</td>
<td>*</td>
</tr>
<tr>
<td>8</td>
<td>7th- and 12th-grade whites and African Americans</td>
<td>Peer nominations</td>
<td>Grades</td>
<td>Sex, race</td>
<td>Correlational</td>
<td>*</td>
</tr>
<tr>
<td>9</td>
<td>4th-, 7th-, and 10th-graders</td>
<td>Peer nominations</td>
<td>Standardized</td>
<td>None</td>
<td>Correlational</td>
<td>*</td>
</tr>
<tr>
<td>10</td>
<td>4th-graders</td>
<td>Teacher rating</td>
<td>Standardized</td>
<td>None</td>
<td>Correlational</td>
<td>*</td>
</tr>
<tr>
<td>11</td>
<td>6th- and 7th-graders</td>
<td>Peer, teacher ratings</td>
<td>GPA</td>
<td>Sex, SES</td>
<td>Longitudinal</td>
<td>*</td>
</tr>
<tr>
<td>12</td>
<td>4th- and 9th-graders</td>
<td>Peer rating, nominations</td>
<td>GPA</td>
<td>None</td>
<td>Longitudinal</td>
<td>*</td>
</tr>
</tbody>
</table>

NOTE: The information presented in this table is representative of empirical findings on this topic. More than 60 studies have been published in this area.

a. An asterisk (*) indicates that the relation between peer relationships and achievement was significant.
1986), and teacher ratings of how well students are accepted by their classmates. Similarly, a range of measures has been used to assess achievement, including standardized test scores, classroom grades, teacher ratings of academic success, and peer ratings of academic success. When included, control variables have consisted of demographic characteristics such as sex and race. Nearly half of the studies followed students over time, and in all but 2 cases peer acceptance was related significantly to academic achievement, regardless of whether assessments were made concurrently or longitudinally.

How might this exercise uncover intriguing puzzles that provide the basis for interesting ideas and research questions? A quick look at Table 18.1 leads to several conclusions about research on peer relationships and achievement. First, research in this area has been conducted on students of all ages. Second, all researchers have operationalized peer relationships in terms of peer acceptance/rejection or sociometric status groups, although multiple methods and informants have been used. Similarly, academic achievement has been operationalized in several ways using multiple informants. Despite these variations in methodologies, the group of studies presented in the table provides resounding evidence of a significant relation between peer acceptance and academic performance, such that well-accepted children at all ages perform at higher levels than do children who are rejected by their peers. Moreover, this relation is stable over time.

At first glance, one might conclude that there is not much left to be done on this topic. However, the basic strategy should be to begin simply by filling in the remaining gaps. For instance, based on the data shown in Table 18.1, it might seem expeditious to consider additional control variables that could explain the significant relations between peer relationships and achievement. However, if researchers had focused on only one age or racial group, then a potentially interesting extension of this literature would be to create questions or hypotheses concerning ways in which multiple age or racial groups might moderate the relation between peer relationships and achievement. Similarly, methodological puzzles would arise if findings had been significant for teacher-assessed acceptance but not peer-assessed acceptance. If this had been the case, then an interesting follow-up question might focus on further explicating the contrasting perspectives on social acceptance offered by peers and teachers. If results had differed as a function of how the dependent variable was measured, then interesting hypotheses could be developed concerning the competencies required to perform well on teacher-developed tests versus standardized tests and how these might be differentially related to peer relationships.

In summary, regardless of the topic of interest, organizational charts similar to Table 18.1 can be created to provide an excellent overview of a field of study. A careful examination of the table should yield valuable information about where the field has been and where it has yet to go. Using this strategy to uncover gaps in the literature is certain to generate a few new and interesting ideas for further study. If, however, a search ends with a robust set of findings (e.g., those shown in Table 18.1) and identification of additional interesting questions proves to be elusive, then an additional strategy would be to reorganize the data using a “variable” approach. This strategy for generating interesting ideas is described next.

**Generating New Variables**

Generating new variables to formulate new and interesting ideas requires the same basic review of the literature that is necessary to document published findings as is shown in Table 18.1. However, this third strategy has as its starting point the three types of variables described in Bronfenbrenner’s (1989) person–process–context model for designing research. In Bronfenbrenner’s formulation, these are variables that have the potential to influence development and change over time. Person variables refer to characteristics of the individual such as IQ, temperament, and other attributes believed to be relatively stable over time. Context variables refer to social address or environmental factors such as socioeconomic status, family size, racial group, parents’ educational attainment, and neighborhood type. Process variables refer to the mechanisms that produce change such as the quality of instruction, communication
patterns, observational learning, and maturation; theoretical assumptions about development and change are the best source of process variables.

Table 18.2 shows how the data organized in Table 18.1 can be reorganized in terms of person–process–context variables. From this new perspective, it appears that relatively little is known about peer relationships and achievement. As shown, person variables have been limited primarily to sex, process variables are virtually unexplored, and context variables have been limited to peer relationships as defined by social acceptance and sociometric status. Therefore, using this organizational structure to think about the original question concerning peer relationships and achievement, an entirely new set of questions should emerge. What other contexts might be important for answering the question? How might variations across these contexts extend understanding of how and why peer relationships might influence achievement? If the definition of peer relationships were extended to include friendships and cliques, would variation in findings across these different relationship contexts change understanding of the functions of peer relationships in achievement settings? Or, how would findings change if context were extended to include out-of-school as well as in-school peer relationships or peer relationships in urban, suburban, and rural schools? Answers to these questions would extend the field in important ways.

Similarly, questions concerning process variables also can be raised. Could communications from peers concerning academic values explain these significant findings? Could opportunities for observational learning from peers explain variations in achievement? Additional person variables also could enrich the story. Would controlling for individual differences in motives for social approval or for academic achievement influence the significance of results? Would a student’s race influence the types or qualities of peer relationships that are developed at school, and could this have an impact on the association between peer relationships and achievement? How would basic temperament influence these relations? In short, a consideration of additional person, process, and context variables can add complexity to research questions and initiate the development of new ideas in ways that a simpler documentation of what has been published cannot.

Bronfenbrenner (1989) also argued, however, that each type of variable by itself can never tell the whole story. Rather, the ways in which person, process, and context variables interact with each other also need to be taken into account. Although a consideration of interactions complicates the picture even further, it reflects to a greater degree how humans learn...
and develop in context over time. For instance, an interesting question using an observational learning perspective (Bandura, 1986) would be the following: Do boys and girls react to modeled behavior of peers in similar or different ways? Similarly, one could ask whether behavior is more likely to be observed if it is modeled by a best friend, a group of classmates, or the highest achiever in the class or whether observational learning works better in elementary classrooms than in high school classrooms? Finally, Bronfenbrenner reminds us that development and change are not static processes. Ideally, research designs should be able to account for consistency and change in persons, processes, and contexts over time. An illustrative question would be the following: Does a peer relationship need to be stable for a certain amount of time before it has an influence on a student’s level of achievement? Ideas and questions concerning time-related issues are certain to have interesting implications for theory as well as practice.

The use of a variable generation strategy enables the identification of a nearly limitless number of new and interesting ideas for research. Indeed, by now a researcher could have a list containing hundreds of interesting questions about peer relationships and achievement. The researcher’s eyes may have glazed over, and he or she might have no idea of how to proceed. How can all of these possibilities help to identify an interesting question that can be addressed in a single program of research? How does one go about designing a study that takes all of these issues into account? It is clear that all possible questions cannot be answered in one study. As noted at the beginning of this chapter, a good place to start is by taking note of ideas that spark personal interest. If only one new thing could be learned about peer relationships and achievement, then what should it be? Other questions can always be tackled later.

Summary

Three strategies that can facilitate the development of new and interesting ideas for research have been described. The first strategy requires careful consideration of the underlying theoretical assumptions used to guide work on a topic. The second strategy entails an in-depth documentation of what has been published. Finally, systematic generation of person, process, and context variables can extend research in myriad ways. Is one strategy better than another? Each strategy is useful in its own right, but these strategies can also be used in conjunction with each other to create new directions for research. At the simplest level, a researcher’s strategies should result in information that will help him or her to refine current understanding of a topic by filling in the gaps and extending an avenue of research to its next logical step. Breaking new ground requires a more sophisticated and innovative look at the data by challenging assumptions or creating a more complex model of person, process, and context variables.

Strategies in Action: Putting Them to the Test

Perhaps the best way of illustrating the utility of each strategy is to describe how it has been implemented in a program of research. The following are brief accounts of how interesting questions have been developed in three interrelated areas using each of the strategies just described.

Challenging Theoretical Assumptions: What Is a Goal?

Questioning theoretical assumptions and turning them upside down to create new and interesting questions for research is challenging. However, do not shy away from attempting to do so; simple ideas, if they are new and unexplored, can go a long way. In my own experience, at least two factors have supported new thinking about theoretical issues: gaining competence in one theoretical perspective and then integrating principles from multiple perspectives. In what follows, I illustrate how I came to ask the following questions. Do students simply want to achieve a goal to do well academically, or do they pursue multiple goals while they are at school? Are academic goals the only ones important for understanding the effects of motivation on performance, or might social goals also be important? These two fairly simple
questions have served as a basis for numerous studies over the years.

Like many students, I began my graduate work with multiple interests, wanting to study achievement motivation, gender differences, and social development. Having taken first a course on motivation, I quickly began reading everything I could find on the topic, especially work that focused on gender differences and socialization processes. Being interested in history, I also discovered the work of David McClelland and Eleanor Maccoby, giants in their respective fields of motivation and social development. From McClelland’s (1987) work, I learned about the conceptual roots of current perspectives on achievement motivation, including the notion that motivation to achieve involves reaching standards of excellence. In addition, however, McClelland demonstrated that individuals can have multiple motives, including social needs, and that achievement motives can be “socialized” in adults by way of direct intervention. Specific socialization strategies, as described by McClelland, were creating a social environment marked by warmth, as well as by social and emotional support, and communicating expectations for reaching one’s full potential (McClelland, 1965).

Maccoby’s work focused on family socialization theory (e.g., Maccoby & Martin, 1983). Maccoby also wrote extensively on the development of sex differences, including differences in boys’ and girls’ motivation and intellectual functioning (Maccoby, 1966). Of particular interest was her suggestion that boys and girls might be motivated to achieve different things, with girls being more interested than boys in pursuing social outcomes and in achieving academically for social reasons. From her work, I also gained exposure to the literature on parents’ socialization of children and ways in which to think about social factors that might contribute to differences in academic achievement. What was particularly intriguing was that both scholars—McClelland and Maccoby—discussed socialization in very similar terms, even though they were talking about very different contexts (families vs. business). In addition, both McClelland and Maccoby proposed that individuals are motivated to pursue social as well as achievement-related goals.

While reading about motivation and socialization, I also was introduced to a unique set of theoretical principles from developmental systems theory (Ford & Ford, 1987) that stood in stark contrast to many of those principles guiding work on motivation. For example, like many motivational theorists, systems theorists view behavior as goal directed, that is, having direction and purpose and being under the control and regulation of the individual. However, from a systems perspective, the context of goal-directed behavior, especially when considered in terms of hierarchically organized systems (e.g., family, peer group, school), was essential for understanding its origins. An additional systems concept was that competence was a reflection of an equilibrium established between the individual and the environment (Bronfenbrenner, 1989; Ford, 1992). Finally, the notion of equifinality—that is, that different and multiple goals can serve the same purpose—provided further impetus for the idea that a variety of goals might explain achievement-related outcomes.

Over the years, this unique set of knowledge bases has contributed to the development of interesting and researchable ideas concerning motivation and adjustment to school. McClelland’s work had demonstrated that people strive to fulfill multiple motives (including social motives), Maccoby argued convincingly that there might be individual differences in the goals that children pursue at school, and systems concepts described competence in terms of the pursuit of multiple goals that resulted in person–environment fit. From the intersection of these multiple perspectives came several related ideas concerning students’ classroom goals. First, it seemed to be useful to adopt a definition of school-related goals that allowed for the pursuit of more than one goal at a time and that included nonacademic outcomes. Indeed, the prevailing definition of achievement goals at the time was that students pursued one of two orthogonal goals that reflected either superior performance or mastery of a task (e.g., Dweck & Leggett, 1988). Second, if students pursued multiple goals at school, then it also seemed reasonable to expect that teachers wanted their students to achieve multiple goals that reflected social outcomes as well as academic outcomes. Finally, inserting the notion of
person–environment fit into the mix, it seemed reasonable to think that students might be most successful at school when the set of goals they pursued overlapped significantly with those that teachers wanted them to pursue.

From this initial set of ideas, I designed a dissertation on multiple goals and achievement (Wentzel, 1989) and began a career of studying the role of multiple goals in students’ academic success, including the role of social goals and social competence in understanding children’s adjustment to school. What made these ideas interesting to me? For the most part, they posed interesting puzzles because they were based on a set of assumptions about why children succeed at school that differed from those guiding other research on motivation. What made these ideas interesting to others? At one level, they reflected common wisdom. My own experience and that of others suggested that students do pursue multiple goals at school. In addition, it was not difficult to find classroom teachers who would confirm that student demonstration of competence social behavior was a high priority in the classroom. From a scholarly perspective, the notion that people pursue multiple goals was certainly not new, nor was the notion that students might pursue social goals (Maehr, 1983). However, few scholars had studied the multiple goals of schoolchildren or empirically assessed social goals as part of a more complex profile of school-related goals. Therefore, it is possible that my introduction to these ideas came at a time when the field needed a fresh look at an enduring problem.

In summary, finding new and interesting ideas by questioning theoretical assumptions and common practice can be facilitated by developing extensive background knowledge on a topic and looking for ways in which multiple perspectives or disciplines intersect. In addition, it is always prudent to trust personal experience, talk to others, and think about what your grandmother would say.

Documenting the Literature:
How Are Peer Relationships Related to Academic Achievement?

What if achieving theoretical insight and creativity proves to be too difficult? My work on peer relationships provides a good example of how to develop new and interesting questions without tackling theoretical abstractions. I embarked on a project to study peer relationships at school while working as a postdoctoral fellow. Knowing relatively little about peer relationships, I began by reading widely in the area to develop a baseline of knowledge. This initial exposure to the topic revealed several issues. First, the work on this topic was fairly atheoretical; research was primarily descriptive, documenting correlates of peer acceptance/rejection and sociometric status group membership. In addition, the findings were extremely consistent (e.g., Newcomb et al., 1993), indicating that popular and well-accepted students, when compared with average-status peers, are more cooperative, helpful, and sociable; demonstrate better leadership skills; and are more self-assertive, whereas low-accepted and rejected students tend to be less compliant; less self-assured; less sociable; and more aggressive, disruptive, and withdrawn. In addition, although researchers in this area did not seem to be particularly interested in school-related outcomes, many of them had documented that rejected or low-accepted children tended to have poor academic records (e.g., Austin & Draper, 1984).

This link to achievement led to a more focused interest in why peer relationships might be related to academic performance, and I began documenting the published research on this narrowed topic. My efforts resulted in a table that was more extensive than, but highly similar to, Table 18.1. Peer acceptance and rejection, as well as popular and rejected sociometric status, had been related consistently to academic outcomes, regardless of methods used or sources of information. Therefore, the evidence indicated a very robust phenomenon. What intrigued me, however, was that studies that included control or mediating variables that might explain this relation were rare; in the absence of theoretical perspectives, there was little empirical evidence to explain why this relation might exist. I had found a puzzle to solve.

Two additional pieces of evidence contributed to my first study of this problem. First, Parker and Asher’s (1987) review of the literature on peer rejection presented the intriguing notion that peer rejection might place
children at risk for two reasons: either (a) because not being liked might actually cause the development of undesirable outcomes over time or (b) because what a rejected child is like (a relatively stable characteristic) might lead to long-term negative consequences. In the first case, peer rejection would have a causal influence on an outcome such as achievement. In the second case, peer rejection would simply be a correlate of achievement, with a second factor having causal influence on both rejection and academic performance.

If the second model was correct, then what underlying characteristic(s) might be related to both peer rejection and academic achievement? Knowing that aggression and prosocial forms of behavior were strong correlates of peer rejection and acceptance, respectively, I then reviewed the literature on behavioral correlates of academic achievement. I found overwhelming evidence for a negative association between aggression and achievement, and from my earlier work on multiple goals I knew there was a positive association between prosocial and socially responsible forms of behavior and achievement (Wentzel, 1991b). Therefore, I extended the findings in Table 18.1 by adding classroom behavioral styles and their corresponding goals as intervening variables that might explain the relation between peer status and academic achievement. A simplified model that guided the resulting study is shown in Figure 18.1.

The results of this study indicated that for middle school students, demonstrations of socially responsible behavior in the classroom could explain significant relations between peer sociometric status and academic achievement, even when controlling for variables such as IQ, sex, ethnicity, school absence, and family structure (Wentzel, 1991a). In addition, the relation between peer status and classroom behavior could be explained, in part, by the social goals that students pursued at school. In short, the findings of the study extended the literature by identifying potential mediators of the relation between peer sociometric status and academic achievement. Therefore, of interest to the field was empirical evidence to support the incidental model described by Parker and Asher (1987), and part of a puzzle would be solved. Of unique interest to me was additional evidence that social factors (peer relationships, social goals, and classroom behavior) could have a significant impact on the academic lives of students.

A second example of how to develop ideas based on documentation and then extension of the literature comes from a follow-up study on peer relationships (Wentzel & Caldwell, 1997). In this case, a variable generation approach provided the primary impetus for the ideas guiding the study. Having already documented the

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**Figure 18.1** Model of Peer Status in Relation to Academic Achievement

NOTE: GPA = grade point average.
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Table 18.3 Generating New Variables: A Follow-Up Study on Peer Relationships and Achievement

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Person</th>
<th>Process</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement</td>
<td>Sex</td>
<td>None</td>
<td>Peer acceptance versus friendships versus cliques</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Behavioral styles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional distress</td>
<td></td>
<td>School</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Variables were generated for Wentzel and Caldwell (1997).

literature on peer acceptance and achievement, the initial thinking for this second study began with a consideration of person, process, and context variables (see the first row of Table 18.2). From this perspective, the field appeared to be wide open for additional research. We first considered contextual factors that might add to the story of peer relationships and achievement. As noted earlier, a number of interesting contexts could be examined in this regard. We chose simply to expand the types of peer relationship contexts to include friendships and peer groups; to that point, no studies had reported on multiple peer contexts in relation to academic achievement. Adding additional peer contexts was potentially interesting because different processes of influence would be implied if some were significantly related to achievement and others were not. We also considered the school that students attended as a context and included samples from two different schools.

In the first study of peer relationships and achievement described earlier, behavioral styles were added as a person variable. In this new study, emotional distress was included as an additional mediator between peer relationships and achievement. Of interest here was the possibility that the quality of peer relationships might directly influence the emotional well-being of a student; in turn, emotional well-being might influence behavior as well as academic outcomes. We did not include process variables. However, we did include a time dimension by following students over a 2-year period. This allowed us to draw some conclusions concerning the stability of predictors and outcomes over time and concerning the correlates of change. Therefore, by considering new variables, we developed a study that involved a relatively simple but new and potentially important extension of the literature. Our new set of person, process, and context variables is shown in Table 18.3.

In summary, I have illustrated how documenting published work and generating new variables led to several new ideas concerning the peer relationship–achievement connection. At the outset, a significant amount of background reading resulted in a fairly focused question about peer relationships and achievement to guide a systematic documentation of the literature (e.g., Table 18.1). In addition, I used what I knew best—the literature on motivation and achievement—to bring a fresh perspective to something about which I knew relatively little. Finally, once some familiarity with the literature had been gained, a variable approach provided the impetus to consider additional person and context variables. A third illustration of how to formulate and develop new and interesting ideas reflects the use of all three strategies. In this case, the key to developing an interesting question was the fact that some ideas simply need time to develop and mature.

Let It Stew: How Do Teachers “Care”?

This final idea has to do with the notion of a caring teacher—how teacher caring is translated into practice and how it motivates students
to engage in the social and intellectual life of the classroom. The roots of this idea began immediately after graduate school while I was working on a project relating parent–child relationships and characteristics of family systems to school-related behavior and achievement. The work was highly complementary to my training in systems theory and allowed me to learn about the social and familial antecedents of adolescents’ classroom behavior. At that time, it struck me that teachers were rarely included in studies of parental influence on children’s adjustment to school but that they might play an important socialization role by either complementing or countering parental and family influences. Knowing little about research on teachers, I began collecting articles that explored teacher predictors of achievement as well as parent predictors of achievement. Most of this work, however, focused on parental involvement and home–school connections and did not explicate processes by which teachers might have a social impact on student outcomes independently of parents. Consequently, the idea was set aside, and work on peer socialization and school adjustment began.

While working on the peer–achievement connection, however, I began to include additional measures in my studies that reflected two social ways in which teachers might influence student motivation and achievement: by providing social support and by liking a student. Indeed, it seemed reasonable that if perceptions of social support from peers and how much peers liked a student were related to motivation and achievement, then social acceptance and approval from teachers might influence students in similar ways. The inclusion of these variables yielded two interesting findings. First, middle school teachers and peers tended to like the same students with one exception, namely that students who were sociometrically neglected (i.e., students who were not well liked but also were not particularly disliked by their peers) were liked by teachers most; these students also were the highest achievers (Wentzel & Asher, 1995). Therefore, at least for some students, levels of support and acceptance from peers could not explain academic excellence. Second, I found that when levels of social support from families, peers, and teachers were taken into account simultaneously, the pathway from teachers’ social support to student achievement was different from the pathways from parental and peer social support to student achievement (Wentzel, 1998). Teachers’ social support seemed to have a greater impact on students’ interest and motivation for schoolwork, whereas parent and peer social support seemed to have the strongest relation to students’ levels of emotional distress. In short, something about the social nature of teaching provided students with unique experiences relevant for understanding motivation and achievement.

This new information helped to refine my earlier interest in teachers by focusing on the notion of social support. A review and documentation of the published literature indicated that nearly all of the studies had employed similar measures of social support. These measures generally asked students how much they thought their teachers cared about them. In this case, my review uncovered a conceptual puzzle: How were students defining the word “care,” and what did it mean when students said that their teachers cared about them? Rather than trying to come up with a conceptual definition on my own, I asked students to provide a definition by generating characteristics of teachers who care about them and of teachers who do not care about them (Wentzel, 1997).

To make sense of the qualitative responses generated by students, I had to develop a coding scheme to analyze the data. While I read about the construct of caring, it became evident that many of the scholars writing in this area (e.g., Noddings, 1992) were describing aspects of effective parenting. Around the same time, I came across an article by Maccoby (1992) that described Kurt Lewin’s work on leadership styles and group processes with school-age boys (Lewin, Lippitt & White, 1939). In her article, Maccoby noted how Lewin’s ideas about warm, democratic, and authoritative leadership styles served as the foundation for subsequent studies of families, including the research on parenting styles (Baumrind, 1971). What struck me at the time was the fact that much of what we knew...
about effective parenting was in fact based on a set of fairly generic social processes that could also describe effective strategies for any adult, including teachers, in working with children. This insight prompted me to use the parenting dimensions described by Baumrind (1971) to develop a coding scheme for the responses about caring from my middle school participants. Based on extensive observations of parents and children, Baumrind concluded that specific dimensions of parent–child interactions could reliably predict children’s social, emotional, and cognitive competencies. These dimensions reflect consistent enforcement of rules, expectations for self-reliance and self-control, solicitation of children’s opinions and feelings, and expressions of warmth and approval. It seemed reasonable to think that teachers interacted with their students along similar dimensions. The result was a set of categories that fit the data in a reliable and meaningful way (Wentzel, 1997).

The logical next step was to replicate and extend these findings to see whether this set of teacher characteristics predicted students’ social and academic competencies in ways predicted by parenting dimensions. Using a variable generation strategy, I also considered additional person and context variables. I included students’ beliefs about control as a person variable because my previous studies had identified these beliefs as correlates of classroom goal pursuit. In addition, others’ previous work had indicated that associations between parenting styles and child outcomes might be moderated by race (Steinberg, Dornbusch, & Brown, 1992). Therefore, this additional context variable also was included in the study. Findings indicated that the teaching dimensions reminiscent of parenting styles explained significant amounts of variance in middle school students’ social and academic goals, classroom behavior, and academic achievement (Wentzel, 2002). In addition, race and sex did not moderate these relations.

To some researchers in the field, this study might have seemed like a very novel and innovative approach to studying classroom processes in relation to student outcomes. From my perspective, however, the study was a natural extension of years of reading, thinking, and conducting research on goal setting, social relationships, and academic achievement. In fact, the findings of this study have already served as the basis for further consideration of person, process, and context variables relevant to understanding teacher effectiveness. Indeed, new person variables could be added to examine the role of individual differences in moderating the effects of teacher characteristics of student motivation. Additional process variables that might interact with teaching dimensions to influence social and academic engagement (e.g., instructional techniques) also could be included. Finally, new context variables, such as subject areas (e.g., mathematics, social studies), class size, and school climate, could be explored. My choice was to add a context I now knew much about—peer relationships. This focused my thinking on issues of generalizability of the teacher effectiveness dimensions and how to refine them to include processes relevant to peer socialization practices as well as teacher socialization practices. A new model of classroom “affordances,” shown in Figure 18.2, is currently serving as a foundation for a next round of studies examining the joint contribution of teacher and peer provisions to students’ self-processes and motivation at different grade levels (Wentzel, 2004).

SUMMARY AND CONCLUSIONS

As a way of summarizing the suggestions presented in this chapter, I now offer a set of guiding principles that I have gleaned along the way. These reflect the basic elements from which interesting ideas are built: expertise, hard work, and perspective taking.

Become an Expert: Cultivate Unique Talents and Skills

For any given topic, there can be as many new ideas and variations on a theme as there are people to contribute. Interesting ideas, however, are unique in that they are built on a level of expertise that allows them not only to stand out but also to withstand challenges and counterarguments from others. Therefore, the development of background knowledge and some core competencies is a necessary first step to finding interesting ideas. In short, idea-generating...
talents will be a product of those things that are understood and known best. Whether interests concern socialization processes, educational leadership, classroom instruction, or qualitative interviewing techniques, the quality of ideas will reflect the amount of work and time taken to develop an area of expertise.

In addition to developing expertise, the idea-generating strategies that will be most useful over time will be those that reflect personal problem-solving styles and levels of comfort with taking intellectual risks. Problem-solving talents might lie in bringing people together to generate collaborative ideas rather than “going it alone,” in identifying essential incremental steps to solving one seemingly intractable problem, or in challenging the status quo to uncover hidden assumptions. Similarly, ideas might come not from questioning theoretical assumptions but rather from challenging methodological traditions or applying new statistical techniques or designs to old problems. Indeed, many theoretical advances have come from the development of new methodologies and ways of assessing phenomena. In all cases, however, a solid foundation of knowledge and expertise is essential for the development of interesting and new ideas.

Commit to It: Do It

The underlying key to success at anything is hard work, persistence, and a determination to make it work. Likewise, the generation of interesting ideas reflects a commitment to working on a problem despite setbacks or periodic lack of inspiration. Ideas need to be constantly tinkered with, rebuilt, and polished over time. As noted earlier, interesting ideas also come from knowing what has been done, what has been discarded, what is taken for granted, what is in vogue, and what ideas others are working on currently. The only way of knowing all of these things is to engage in a process of constant intellectual renewal—read everything possible, talk to people, and listen closely to what others have to say. In addition, it is worth remembering that knowing comes from doing, even if some efforts are more successful than others. Indeed, not all research is published in top journals; in fact, not everything that is published will even be read by someone other than the journal editor and a few reviewers. However, the more ideas that are generated and put to the test empirically, the more likely it is that some ideas that are truly interesting will be produced. Finally, inherent in the notion of commitment is the reality that things take time. New and interesting ideas are rarely formed at the outset. In fact, some may take years to develop to a point where they are tenable. Let them stew and let them grow; their time will come.

Take the Other Perspective

In this chapter, I have focused mostly on how to develop ideas from the perspective of the

Social-Motivational
Processes Provisions of:
- Emotional support
- Expectations and values
- Help
- Safety

Self-Processes
- Efficacy
- Control beliefs
- Reasons for behavior
- Affect

Figure 18.2  Model of Teacher and Peer Provisions Supporting Classroom Goal Pursuit

researcher. However, what might be profoundly interesting to one researcher and seem like the best idea the field has seen in years might seem trivial or inconsequential to other researchers. Even when an idea seems to be absolutely brilliant, others still must be convinced; trying to “sell a better mousetrap” is a difficult chore. Making ideas interesting to others requires communicating a vision in ways that are understandable and acceptable to those who probably do not view the world through the same lens. Therefore, the selling of good ideas requires the same patience and persistence as did the development of the idea itself.

The art of framing ideas in ways that will be interesting to others also requires knowing one’s audience and being sensitive to the ideas of many other scholars that might contradict one’s own. It is necessary to explain ideas in the language of other researchers, describe them in ways so that they become extensions of what has come before, and articulate ways in which other perspectives might contribute to their further development. The goal should be to contribute to the collective wisdom as much as possible. It is also worth noting that scholars are likely to interpret a new idea in ways that are simply incorrect. Moreover, they will use their interpretations to support new directions in their own work. In those instances, it is best to consider that perhaps the most interesting and successful ideas are those that challenge others to think creatively and in new ways within their own frames of reference, even if their interpretations are not what were intended.

In conclusion, throughout this chapter I have offered strategies that might prove to be useful for generating new and interesting ideas. These strategies entail challenging theoretical assumptions, documenting the published literature, and generating new variables. Although the deliberate and systematic use of these strategies is likely to be most useful for new scholars and for those who wish to extend their work to new areas, these strategies also may be useful for established researchers who wish to review where they have been and think about what to do next. Indeed, challenging personal assumptions, documenting what one has accomplished so far, and considering variables that have not been studied are likely to provide a fresh look to any program of research. In addition, it has been suggested that idea-generating talents are likely to be a product of those things that bring personal enjoyment and reflect areas of expertise. Good ideas also are more often the result of hard work and persistence than of some innate talent or one brilliant moment of insight; the development of ideas should be an ongoing process, not a product. Finally, good ideas are those that have been made acceptable to those who have not previously considered them. As Mark Twain once observed, “The man with a new idea is a crank until the idea succeeds.” I hope that these suggestions will contribute to the development of many interesting and successful ideas.

REFERENCES


