How Teachers Can Promote Students’ Autonomy During Instruction: Lessons from a Decade of Research

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Which do you see, a vase or two faces?
Which do you see, students’ engagement or teachers’ motivating styles?
Which do you see, students’ engagement or teachers’ motivating styles?
Teachers’ Motivating Styles and Students’ Engagement
Teacher-Student Dialectic

Students’ Inner Motivational Resources

- Interests
- Preferences
- Psychological Needs
- Internalized Values

Teachers’ Motivating Styles

- Autonomy Supportive vs. Controlling

Teachers’ Motivating Styles and Students’ Engagement

Students’ Inner Motivational Resources

• Interests
• Preferences
• Psychological Needs
• Internalized Values

Teachers’ Motivating Styles

• Autonomy Supportive vs. Controlling

Autonomy Support vs. Behavioral Control
Overview

Understanding and Valuing
- Students’ Engagement during Learning Activities
- Students’ Autonomy
- Teachers’ Autonomy-Supportive Motivating Style

Supporting Students’ Autonomy
- How? Why?
- Can Teachers Learn to Be More Autonomy Supportive?
- It’s Not Autonomy Support or Structure, but Autonomy Support and Structure
Extent of Engagement
During a Learning Activity

Engagement
The behavioral intensity, emotional quality, and personal investment of a student’s active involvement during a learning activity.
Extent of **Engagement**
During a Learning Activity

**Behavior**
- Attention
- Effort
- Persistence

- **Attention**: Concentration and on-task focus.
- **Effort**: Investment of one’s full measure of their capacities in what they are doing.
- **Persistence**: Investment of effort over time, even facing difficulties, setbacks.
Behavioral engagement takes place within an emotional atmosphere of positive emotion: interest, enthusiasm, enjoyment, and a sense of wanting to.
Extent of **Engagement** During a Learning Activity

**Behavior**
- Attention
- Effort
- Persistence

**Emotion**
- Interest
- Enjoyment
- Enthusiasm

**Cognition**
- Personal Investment
- Preference for Challenge

Planning, monitoring, and evaluating one’s work.
Using sophisticated learning strategies:
- Elaborating
- Summarizing
- Rehearsing
Extent of **Engagement**
During a Learning Activity

An expression of the self during task involvement.
- Offer suggestions
- Recommend activities
- Express interests, preferences
- Participate in and contribute to class discussions
- Ask questions about what is being learned

Basically: Attempt to influence the flow of the class in a constructive way.
Extent of Engagement During a Learning Activity

- **Behavior**
  - Attention
  - Effort
  - Persistence

- **Emotion**
  - Interest
  - Enjoyment
  - Enthusiasm

- **Cognition**
  - Personal Investment
  - Preference for Challenge

- **Voice**
  - Expressing Preferences
  - Participating
Why Spend Time Talking about Engagement?
Why Engagement is Important
Four Reasons

1. Engagement makes learning possible.
The development of skills is practically impossible without attention, effort, persistence, positive emotion, commitment, and voice. Engagement is a prerequisite for a productive learning experience.
Why Engagement is Important

1. Engagement makes learning possible.

2. Engagement predicts school functioning.
   Engagement predicts how well students fare in school, especially their achievement (grades, standardized test scores) and eventual completion of school (vs. dropping out).
Why Engagement is Important

1. Engagement makes learning possible.

2. Engagement predicts school functioning.

3. Engagement is malleable.
   Because engagement is malleable, it makes sense to give serious considerations to school-based interventions that aim to enhance students’ engagement.
Why Engagement is Important

1. Engagement makes learning possible.
2. Engagement predicts school functioning.
3. Engagement is malleable.
4. **Engagement gives teacher’s feedback.**

   Engagement gives teachers the moment-to-moment feedback they need to determine how well their efforts to motivate students are working. High versus low engagement is telltale feedback about students’ underlying motivation during the lesson.
Compliance versus Engagement

Compliance

Behavior

Engagement

Behavior

Emotion

Cognition

Voice
Autonomy
“The inner endorsement of one’s actions.”

Internal Perceived Locus of Causality (IPLOC)
“I want to read the book.”

Psychological Freedom (Volition)
“As I read, I feel free.”

Perceived Choice over One’s Actions
“It is my choice whether to read, when to read, and when to stop reading.”

Do Students Benefit from High Autonomy?

Perceived autonomy correlates with a host of positive outcomes, including…

• Greater Engagement
• More Positive Emotionality
• Greater Conceptual Learning
• Preference for Optimal Challenge
• Greater School Retention (vs. Drop out)
• Higher Academic Achievement
Do All Students *Need* Autonomy?

Yes, all students need and benefit from autonomy—the inner endorsement of their behavior, including

- Korean students with collectivistic values
- Students with special needs (e.g., MR).
What makes a learning experience satisfying?

Mean Salience and Correlation with Positive Affect for the Satisfaction of Eight Candidate Needs Underlying a Positive, Satisfying Learning Experience

<table>
<thead>
<tr>
<th>Psychological Need</th>
<th>Mean Salience</th>
<th>r with Positive Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td>High competence</td>
<td>4.34 a</td>
<td>.21*</td>
</tr>
<tr>
<td>High autonomy</td>
<td>4.11 a, b</td>
<td>.39*</td>
</tr>
<tr>
<td>High self-esteem</td>
<td>4.09 b</td>
<td>.29*</td>
</tr>
<tr>
<td>High relatedness</td>
<td>4.07 a, b</td>
<td>.27*</td>
</tr>
<tr>
<td>High stimulation</td>
<td>4.00 b</td>
<td>.46*</td>
</tr>
<tr>
<td>High self-actualization-meaning</td>
<td>3.72 c</td>
<td>.38*</td>
</tr>
<tr>
<td>High safety-security</td>
<td>3.38 d</td>
<td>.30*</td>
</tr>
<tr>
<td>High popularity-influence</td>
<td>3.17 e</td>
<td>.36*</td>
</tr>
</tbody>
</table>

Note. Means not sharing subscripts are significantly different from each other at $p < .01$. Means could range from 1 to 7.
* $p < .01$. $N = 144$.

What makes a learning experience unsatisfying?

Mean Salience and Correlation with Negative Affect for the Frustration of Eight Candidate Needs Underlying a Negative, Unsatisfying Learning Experience

<table>
<thead>
<tr>
<th>Psychological Need</th>
<th>Mean Salience</th>
<th>$r$ with Negative Affect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low autonomy</td>
<td>3.91 a</td>
<td>.23*</td>
</tr>
<tr>
<td>Low stimulation</td>
<td>3.89 a</td>
<td>.24*</td>
</tr>
<tr>
<td>Low competence</td>
<td>3.56 b</td>
<td>.28*</td>
</tr>
<tr>
<td>Low self-actualization-meaning</td>
<td>3.30 c</td>
<td>.27*</td>
</tr>
<tr>
<td>Low self-esteem</td>
<td>3.19 c, d</td>
<td>.48*</td>
</tr>
<tr>
<td>Low safety-security</td>
<td>3.11 c, d, e</td>
<td>.42*</td>
</tr>
<tr>
<td>Low popularity-influence</td>
<td>3.03 d, e, f</td>
<td>.40*</td>
</tr>
<tr>
<td>Low relatedness</td>
<td>2.77 f</td>
<td>.33*</td>
</tr>
</tbody>
</table>

*Note. Means not sharing subscripts are significantly different from each other at $p < .01$. Means could range from 1 to 7. * $p < .01$. $N = 134$.

Autonomy Support: 4 Dimensions
(Supporting students’ autonomy during learning activities; Supporting students’ intrinsic motivation & internalization)

• Nurtures inner motivational resources
• Relies on informational language
• Promotes valuing
• Acknowledges and accepts negative affect as valid reaction to constraints
Nurture Inner Motivational Resources

Motivational Problem: Initiating students’ classroom engagement.

versus

Build instructional activities around students…
• Interests
• Enjoyment
• Sense of Being Challenged
• Preferences
• Choice-Making

Rely on external regulators, such as…
• Incentives
• Consequences (Rewards)
• Directives
• Assignments
• Compliance Requests
Rely on Informational Language

Motivational Problem: Respond to students’ motivational problems (e.g., listlessness, poor performance).

versus

Communicate classroom requirements and opportunities through messages that are…

• Noncontrolling
• Informational
• Flexible

Communicate classroom requirements and opportunities through messages that are…

• Pressuring
• Critical
• Rigid
Motivational Problem: Motivating students on uninteresting (but important) lessons.

When asking students to engage in a requested activity, behavior, or procedure…

versus

Provide rationales to explain the lesson’s…
• Utility (Use)
• Importance
• Value, Meaning
• Hidden Value

Neglect to communicate what it is about this lesson that makes it worthwhile—that justifies students’ investment of effort.
Acknowledge and Accept Expressions of Negative Affect

Motivational Problem: Inevitable conflict between what teachers want students to do and what students want students to do.

versus

Acknowledge and accept such feelings and resistance as a valid reaction to the teacher’s constraints, demands, and imposed structures.

Counter students’ negative affect, arguing that such “attitude” is unacceptable—something that needs to be changed, fixed, or reversed into a more acceptance attitude.
• Can teachers learn to be more autonomy-supportive toward their students?
• Can teachers learn to be more autonomy-supportive toward their students?

• Can veteran teachers learn to expand their existing motivating styles to incorporate a greater use of autonomy-supportive instructional behaviors during their instruction?
## Results

*(Teachers’ Autonomy-Supportive Behaviors during 2nd Classroom Observation)*

<table>
<thead>
<tr>
<th>Instructional Behavior</th>
<th>Control Group</th>
<th>Experimental Group</th>
<th>ANCOVA $F(1, 17)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurtures inner motivational resources</td>
<td>3.05 (1.35)</td>
<td>5.36 (1.44)</td>
<td>7.79*</td>
</tr>
<tr>
<td>Relies on informational language</td>
<td>2.69 (1.32)</td>
<td>5.22 (1.43)</td>
<td>12.44*</td>
</tr>
<tr>
<td>Promotes valuing</td>
<td>1.86 (1.12)</td>
<td>3.32 (1.54)</td>
<td>4.74*</td>
</tr>
<tr>
<td>Acknowledges and accepts negative affect as okay</td>
<td>3.28 (0.95)</td>
<td>5.13 (1.11)</td>
<td>11.00*</td>
</tr>
</tbody>
</table>

*Adjusted Mean score in blue. Possible range = 1 to 7.*

Relationship between Teacher-Provided Autonomy Support and Structure

• What Is Structure?

• How Does Structure Relate to Autonomy Support?
# Teacher-Provided Provision of Structure

<table>
<thead>
<tr>
<th>To get students’ started…</th>
<th>To keep them going…</th>
<th>To finish them up…</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Directions</td>
<td>• Reminders</td>
<td>• Rewards</td>
</tr>
<tr>
<td>• Goals</td>
<td>• Encouragements</td>
<td>• Feedback</td>
</tr>
<tr>
<td>• Incentives</td>
<td>• Prompts</td>
<td>• Posttask Analysis</td>
</tr>
<tr>
<td>• Schedule of Events</td>
<td>• Modeling</td>
<td>(Strengths/Weaknesses)</td>
</tr>
<tr>
<td>• Standards</td>
<td>• Suggestions</td>
<td>• Suggestions for Next</td>
</tr>
<tr>
<td>• Challenges</td>
<td>• Praise</td>
<td>Time</td>
</tr>
</tbody>
</table>

Based on:
How Structure and Autonomy Support Both Contribute to Students’ Engagement

Provision of Structure
- Pre-Lesson Plan, Expectations
- In-Lesson Directions, Guidance
- Post-Lesson Feedback

Provision of Autonomy Support
- Nurture Inner Motivational Resources
- Informational Language
- Promote Valuing
- Acknowledge & Accept Negative Affect

Extent of Engagement
- Attention
- Effort
- Persistence
- Positive Emotion
- Verbal Participation
- Voice

2 (Autonomy) x 2 (Structure) Framework

- Hi Autonomy
  - Autonomy-Supportive Motivating Style
  - Demanding but Inconsistent Motivating Style
- Low Autonomy
  - Permissive Motivating Style
  - Controlling Motivating Style

Low Structure

High Structure
Student Engagement Scores (z-scores) 
from 122 Milwaukee High School Teachers

High Autonomy

Permissive Motivating Style 
$z = -0.02$

Autonomy-Supportive Motivating Style 
$z = +0.64$

Demanding but Inconsistent Motivating Style 
$z = -0.73$

Controlling Motivating Style 
$z = +0.17$

Low Autonomy

Low Structure

High Structure

Extent of Engagement During a Learning Activity

- **Behavior**
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- **Emotion**
  - Interest
  - Enjoyment
  - Enthusiasm

- **Cognition**
  - Investment
  - Preference for Challenge

- **Voice**
  - Expressing Preferences
  - Participating

Teacher-Provided Structure

Teacher-Provided Autonomy Support
Conclusions

1. We know what autonomy is, and how students benefit from it.

2. We know what autonomy support is and how teachers do it.

3. We know that teachers can learn to become more autonomy supportive.

4. We know that when teachers enact autonomy-supportive instructional behaviors, their students show a strong, immediate, and positive engagement effect.

5. And, we know that teachers don’t need to choose between autonomy and structure but, instead, more of both is better.