Teacher Responsibility: Ties to Pedagogical Knowledge and Professionalism

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OECD Symposium • 18 June 2014 Brussels, Belgium
Theme of this symposium

Teachers as Learning Specialists
Implications for Teachers' Pedagogical Knowledge and Professionalism

= knowledgeable about and can use (general and content-specific) research-based principles of effective teaching

cf. Turner (in press), Advances in Motivation and Achievement
# Learning specialists

- **Synthesis of research-based principles of effective teaching:**

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Social factors & Learning** | • Develop positive relationships with students (e.g., display friendliness, sincerity, and caring)  
• Encourage collaboration  
• Classroom management     |
| **Instruction & Learning**     | • Review previous learning  
• Present new knowledge in small steps with time for practice  
• Ask students to explain what they learn  
• Check the work of and engage *all* students |
| **Motivation & Learning**     | • Teach with enthusiasm  
• Provide mastery-oriented instruction (emphasis on effort, learning, task mastery)  
• Provide autonomy-supportive instruction (structure, choices, rationales)  
• Set high expectations with clear learning goals & informative feedback  
• Provide opportunities for students to experience competence |

Brophy (1999); Boekaerts (2002); Rosenshine (2010); Generic aspects of effective teaching. Educational Practices Series, International Academy of Education, Brussels, Belgium
Motivational Characteristics

• What factors motivate teachers to engage in such practices?
  
  • Prior research on teacher motivation has been limited to
    • Beliefs about ability (teacher efficacy)
    • Psychological wellbeing (burnout and job satisfaction)
  
  • Renewed interest in teacher motivation
    • Teachers’ achievement goals (Butler)
    • Teaching-related expectancies and values (Watt & Richardson)
    • Teachers’ enthusiasm (Kunter, Frenzel et al.)
    • Self-determination (Assor et al., Roth et al.)
    • Teachers’ sense of professional responsibility (Lauermann & Karabenick)

(Watt & Richardson, 2008, JLI; Lauermann & Karabenick, in press, Teacher Motivation)
What is responsibility?

Personal responsibility is a sense of *internal* obligation and commitment to produce or prevent designated outcomes or that these outcomes should have been produced or prevented.

(Lauermann & Karabenick, 2011, *Educational Psychologist*, p. 127)
Why teacher responsibility?

• **Responsibility has motivational implications**
  - Teachers may invest considerable effort to provide high-quality instruction, to help struggling students, and to meet not only academic, but also socio-emotional and developmental needs of their students
    (Broadfoot, Osborn, Gilly, & Paillet, 1987; Fischman, DiBara, & Gardner, 2006; Halvorsen, Lee, & Andrade, 2009; Lauermann, 2014; Schalock, 1998)

• **Personal responsibility has been associated with:**
  - Intrinsic work motivation and job performance
    (Hackman & Oldham, 1976; Humphrey, Nahrgang, & Morgeson, 2007)

• **Teacher responsibility linked to:**
  - General teacher efficacy, willingness to implement innovative instructional practices, and positive affect toward teaching
    (Guskey, 1981, 1984, 1988)
  - Job satisfaction and job autonomy
    (Winter, Brenner, & Petrosko, 2006)
  - Student achievement
    (Lee & Loeb, 2000; Lee & Smith, 1996).
Assessment Challenges

- Overall, relatively little research on teacher responsibility – in part due to existing assessment challenges
  - Available assessments often pose psychometric challenges (e.g., low internal consistency, inconsistent factorial structures)
  - Researchers have used generic measures not specific to teaching (e.g., “Are you responsible for the work you do on this job?”)
  - Used interchangeableably with internal locus of control and efficacy
    - “I can” is not the same as “I feel responsible”

(Lauermann & Karabenick, 2013, *TATE*; in press, *Teacher Motivation*)
Measurement & Implications

• How can we measure teacher responsibility?

• Can we distinguish between responsibility for different outcomes (e.g., “student outcomes” vs. “teaching”)?

• Is responsibility different from beliefs about capability and control (“I can” vs. “I feel responsible”)?

• Does responsibility have implications for teachers’ instructional approaches, as perceived by teachers vs. students?
Imagine the following situations would occur in your class. To what extent would you feel PERSONALLY responsible that you should have prevented each of the following?

Scale: 0 = “not at all responsible” to 100 = “completely responsible”

<table>
<thead>
<tr>
<th>Scale</th>
<th>Sample item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td>I would feel PERSONALLY responsible if…</td>
</tr>
<tr>
<td>Student motivation</td>
<td>…a student of mine was not interested in the subject I teach.</td>
</tr>
<tr>
<td>Student achievement</td>
<td>…a student of mine had very low achievement.</td>
</tr>
<tr>
<td>Relationships w/</td>
<td>…a student of mine did not believe that I truly cared about him/her.</td>
</tr>
<tr>
<td>students</td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td>…a lesson I taught was not as effective for student learning as I could have possibly made it.</td>
</tr>
<tr>
<td>(12 items)</td>
<td></td>
</tr>
</tbody>
</table>

Responsibility for different outcomes?

- **In-Service Teachers** ($n = 412$) in the U.S.
- **Good model fit**
  \[ \chi^2 (48, N = 412) = 106.48, \text{CFI} = .98, \text{TLI} = .97, \text{RMSEA} = .05, \text{SRMR} = .03 \]
  - Student motivation ($\alpha = .88$)
  - Student achievement ($\alpha = .86$)
  - Relationships ($\alpha = .87$)
  - Teaching ($\alpha = .87$)
- **Alternative models – worse fit**

(Lauermann & Karabenick, 2013, *TATE*)
Responsibility for different outcomes?

- Pre-service Teachers \( (n = 315) \) in Germany

- Good model fit
  \[ \chi^2 (59, N = 314) = 86.18, \text{CFI} = .98, \text{TLI} = .98, \text{RMSEA} = .04, \text{SRMR} = .04 \]
  - Student motivation \( (\alpha = .84) \)
  - Student achievement \( (\alpha = .84) \)
  - Relationships \( (\alpha = .78) \)
  - Teaching \( (\alpha = .79) \)

- Alternative models – worse fit
  - Gender
  - Prior teaching experiences

(Lauermann & Karabenick, 2013, *TATE*)
Responsibility vs. Efficacy

- German pre-service teachers (n = 315)

Responsibility:
“I would feel personally responsible if a student of mine wasn’t interested in the subject I teach.”

Efficacy:
“I am confident that I can get any of my students interested in the subject I teach.”

χ² (258, N = 315) = 443.58, CFI = .96, TLI = .94, RMSEA = .05, SRMR = .05
Scale Development Summary

• An outcome-specific teacher responsibility assessment was developed for four types of outcomes
  • Student motivation
  • Student achievement
  • Relationships with students
  • Teaching

• Confirmed the discriminant validity of responsibility, compared to efficacy, which suggests that “I can” is not equivalent to “I feel responsible”

• Replicated the same factor structure with pre-service and in-service teachers
Responsibility & Effective Teaching

• Does responsibility have implications for teachers’ approaches to teaching, as perceived by:
  
  • (a) teachers?

  • (b) students?
Teacher Reports

- Different subsets of the four responsibility factors have been associated with teacher-reported approaches:

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Source</th>
<th>RSM</th>
<th>RSA</th>
<th>RRS</th>
<th>RTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive teacher emotions</td>
<td>U.S. in-service teachers; Turkish pre-service teachers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mastery-oriented instruction</td>
<td>German pre-service teachers; U.S. &amp; Israeli in-service teachers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓ (✓)</td>
</tr>
<tr>
<td>Autonomy-supportive instruction</td>
<td>Swiss in-service teachers; Canadian pre-service teachers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Professional commitment and planned persistence</td>
<td>Turkish pre-service teachers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Student Reports

- **Perceived teacher enthusiasm**
  - Teacher is enthusiastic about and enjoys teaching & subject

- **Mastery-oriented instruction**
  - Teacher places emphasis on effort, task mastery, and improvement

- **Paying attention to all students vs. differential treatment**
  - Teacher does not prioritize strong/high achieving students
Responsibility & Effective Teaching

• **Perceived teacher enthusiasm**
  • Teacher is perceived as enthusiastic about teaching & subject
  • Related to student enthusiasm and desirable teaching practices (student-reported social support, classroom management, cognitive challenge) *(Kunter et al., 2008; Frenzel et al., 2009)*

• **Links to responsibility**
  • Generic assessments of personal responsibility predict intrinsic motivation and job satisfaction *(e.g., Humphrey et al., 2007)*
  • Responsibility for student outcomes and teaching predicted positive teaching emotions *(Lauermann & Karabenick, 2013)*

• **Research questions**
  • Do students perceive responsible teachers as more enthusiastic?
  • If so, responsibility for which outcomes?
Responsibility & Effective Teaching

- **Mastery-oriented instruction**
  - Teacher places emphasis on effort, task mastery, and personal improvement
  - Related to various indicators of student motivation & learning (e.g., Midgley, 2002)

- **Links to responsibility**
  - Links to responsibility for students’ socio-emotional needs (e.g., Roeser et al., 2002)
  - Links to teachers’ relational goals (Butler, 2012)

- **Research questions**
  - Do students perceive responsible teachers as mastery-oriented?
  - If so, responsibility for which outcomes (relationships vs. achievement)?
Responsibility & Effective Teaching

• **Paying attention to *all* students vs. differential treatment**
  - Teacher does not prioritize strong/high achieving students
  - Related to students’ self-perceptions and learning (e.g., Babad, 1995; Brattesani et al., 1984)

• **Links to responsibility**
  - Collective teacher responsibility for student learning predicts more equally distributed achievement gains within a school (Lee & Loeb, 2000; Lee & Smith, 1996)

• **Research questions**
  - Are responsible teachers less likely to engage in differential treatment?
  - If so, responsibility for which outcomes?
Responsibility & Effective Teaching

- **Israeli in-service teachers (n = 62) + students (n = 1516)**

  - **T1:** At the beginning of the school year teachers reported:
    - Responsibility for student motivation ($\alpha = .73$)
    - Responsibility for student achievement ($\alpha = .82$)
    - Responsibility for relationships with students ($\alpha = .83$)
    - Responsibility for teaching ($\alpha = .84$)
    - Teacher efficacy ($\alpha = .90$)
      e.g., “How much can you do to motivate students who show low interest in school work?”, “To what extent can you provide an alternative explanation or example when students are confused?”

  - **T2:** At the end of the school year, their students reported:
    - Perceived teacher enthusiasm ($\alpha = .82$; ICC = .27)
      e.g., “This teacher teaches with enthusiasm”
    - Mastery-oriented practices ($\alpha = .83$; ICC = .15)
      e.g., “This teacher wants us to understand our work, not just memorize it” and “This teacher recognizes us for trying hard.”
    - Perceived differential treatment ($\alpha = .83$; ICC = .14)
      e.g., “In class, the teacher pays more attention to the stronger students”
Responsibility & Effective Teaching

• Israeli in-service teachers (n = 62) + students (n = 1516)

BETWEEN CLASSES
n = 62 teachers

WITHIN CLASSES
n = 1516 students

Teacher Efficacy

Responsibility for Student Motivation
(R^2 = .05)

Responsibility for Student Achievement
(R^2 = .07)

Responsibility for Relationships
(R^2 = .04)

Responsibility for Teaching
(R^2 = .07)

Student-Reported Teacher Enthusiasm
(R^2 = .17)

Mastery-Oriented Instruction
(R^2 = .13)

Student-Reported Differential Treatment
(R^2 = .26)

\(\chi^2 = 1.331, \text{ df} = 4, \ CFI = 1.000, \ TLI = 1.012, \ RMSEA < .01, \ SRMR_{between} = .018, \ SRMR_{within} < .01\)
• Responsibility was associated with desirable instructional approaches, whereas efficacy alone was not
  • “I can” is not the same as “I feel responsible”

• The outcome for which teachers feel responsible has implications for their instructional approaches
  • Important to ask “responsible for what”
  • Feeling responsible for relationships with students is a key characteristic of desirable instructional approaches; teacher responsibility should not be limited to academic outcomes
Next Steps: Ongoing research

• **Examine latent profiles of teacher responsibility**
  • Study the combined effects of responsibility factors on approaches to instruction

• **Focus on student responsibility**
  • Adapted the scales to measure students’ personal responsibility
  • Implications of responsibility for students’ self-regulation, expectancies & values, intrinsic motivation, achievement

• **Plan to link research on teacher & student responsibility → effects on students’ educational outcomes**
“...teachers who elicit strong achievement gains accept responsibility for doing so. They believe that their students are capable of learning and that they (the teachers) are capable of and responsible for teaching them successfully. If students do not learn something the first time, they teach it again, and if the regular curriculum materials do not do the job, they find or develop others that will.”

(Brophy, 1999, p.31, Educational Practices Series – 1, Summary of research-based principles of effective teaching)
Thank you
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